

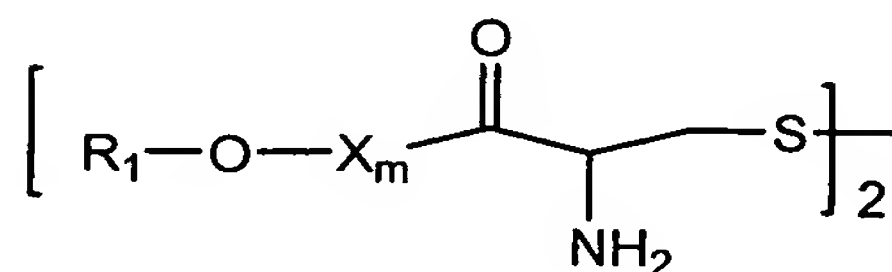
## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

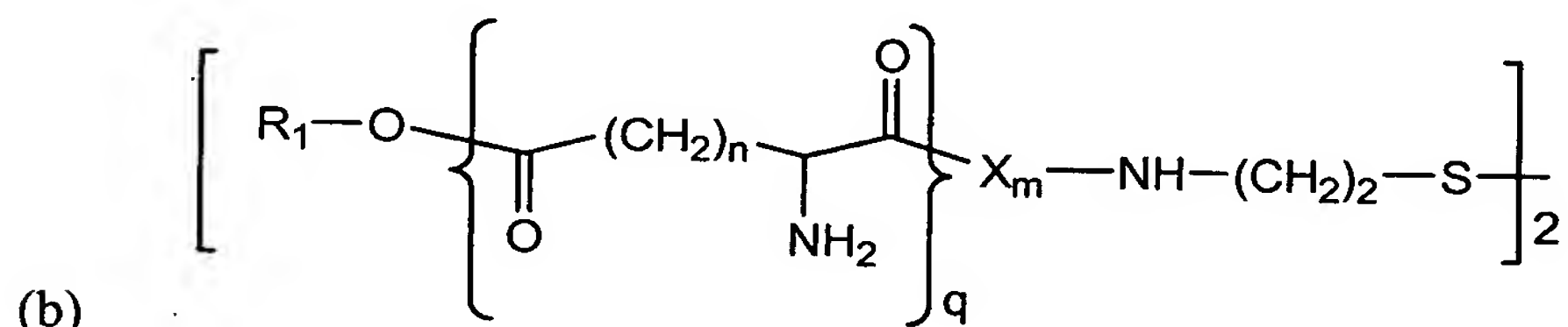
Listing of Claims:

1(Original). A pharmaceutical composition useful for the treatment of cancer comprising a compound selected from the formula consisting of

(a)

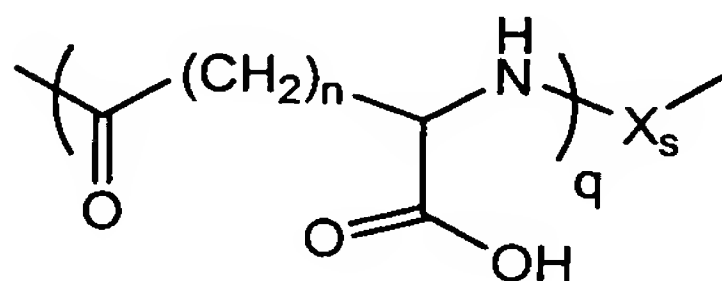


and



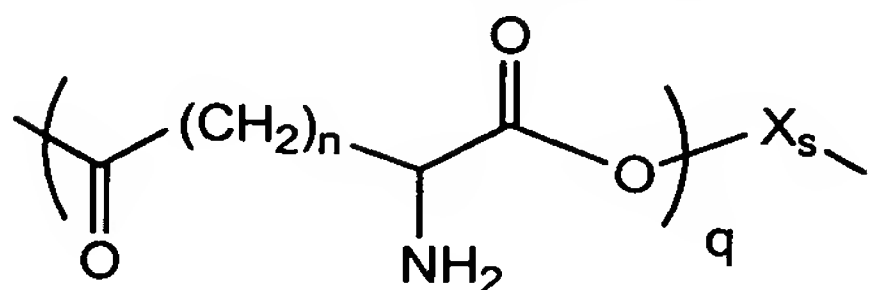
wherein for either formula (a) and (b),  $R_1$  is a substituted or unsubstituted lower alkyl of 1 to 10 carbon atoms,  $X$  is a naturally-occurring or non-naturally-occurring amino acid, and  $m$  is an integer of 0 to 20 and wherein for formula (b),  $n$  is an integer of 1 or 2, and  $q$  is an integer of 0 or 1, or a pharmaceutically acceptable salt thereof in a pharmaceutically acceptable carrier.

2(Original). The composition according to claim 1, wherein  $X_m$  of formula (a) is



wherein n is an integer of 1 or 2, and q is an integer of 0 or 1, and s is an integer of 0 to 19.

3(Original). The composition according to claim 1, wherein  $X_m$  of formula (a) is



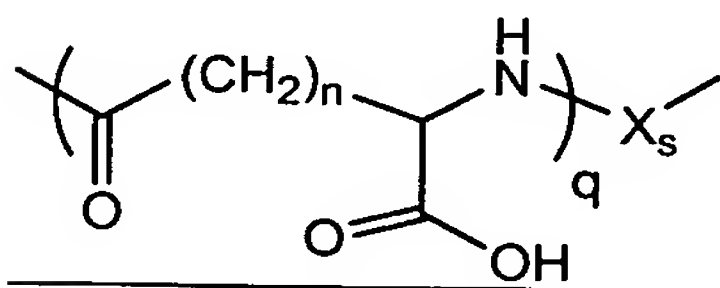
wherein n is an integer of 1 or 2, and q is an integer of 0 or 1, and s is an integer of 0 to 19.

4(Currently Amended). The composition according to claim 1, ~~wherein for which is~~ selected from the group consisting of:

i. said formula (a), wherein m is 0;

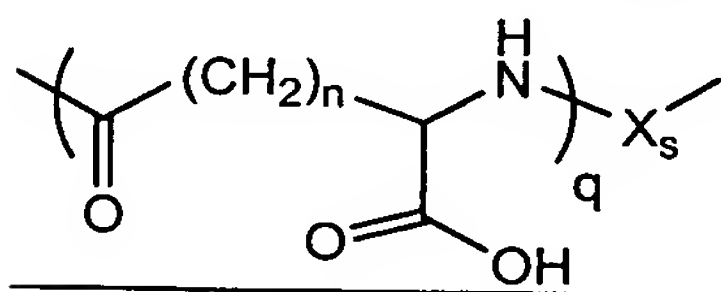
ii. said formula (a), wherein m is 0, said  $R_1$  is a methyl group, and said compound is cystine dimethyl ester;

iii. said formula (a), wherein  $X_m$  of formula (a) is



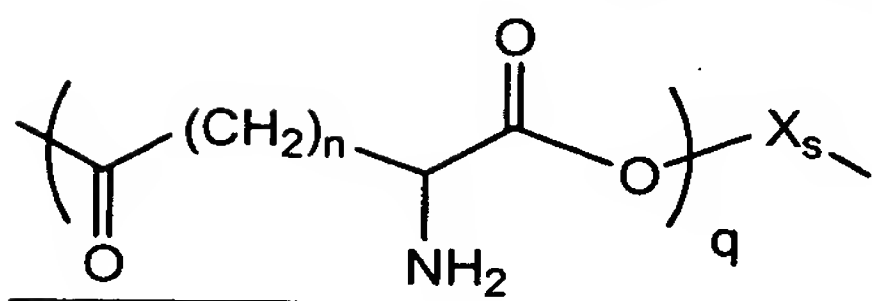
wherein n is an integer of 1 or 2, and q is an integer of 0 or 1, and s is an integer of 0 to 19, X is selected from the group consisting of D-Asp, L-Asp, D-Glu and L-Glu, and m is 1;

iv. said formula (b), wherein  $X_m$  of formula (a) is



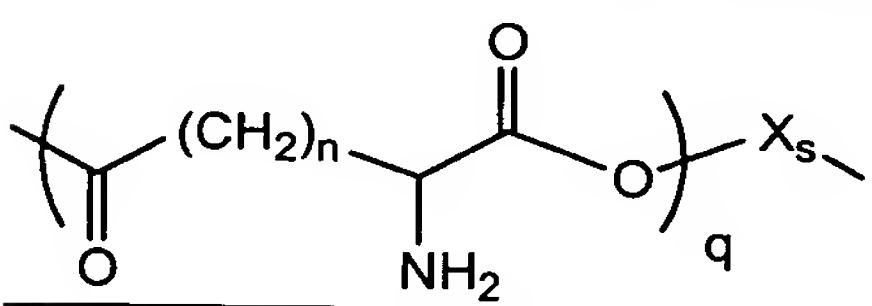
wherein n is an integer of 1 or 2, and q is an integer of 0 or 1, and s is an integer of 0 to 19, X is selected from the group consisting of D-Asp, L-Asp, D-Glu and L-Glu, and m is 1;

v. said formula (a), wherein  $X_m$  of formula (a) is



wherein n is an integer of 1 or 2, and q is an integer of 0 or 1, and s is an integer of 0 to 19, wherein X is selected from the group consisting of D-Asp, L-Asp, D-Glu and L-Glu, and m is 1;

vi. said formula (b), wherein  $X_m$  of formula (a) is



wherein n is an integer of 1 or 2, and q is an integer of 0 or 1, and s is an integer of 0 to 19, wherein X is selected from the group consisting of D-Asp, L-Asp, D-Glu and L-Glu, and m is 1;

vii. said formula (b), wherein q is 1 and m is 0;

viii. said formula (b), wherein  $R_1$  is a methyl group;

ix. said formula (b), wherein m is an integer from 1 to 10; and

x. said formula (b), wherein m is 1.

5-10(Canceled).

11(Original). The composition according to claim 1, comprising at least one compound of formula (a) and at least one compound of formula (b).

12(Currently Amended). The composition according to claim 1, further comprising ~~an additional~~ a cytotoxic compound.

13(Currently Amended). The composition according to claim 12, wherein said cytotoxic compound is an apoptotic compound or a chemotherapeutic compound.

14(Canceled).

15(Original). The composition according to claim 1, wherein said compound of Formula (a) or (b) upon exposure to a susceptible cell increases the cell's intralysosomal cystine level above 0.5 nmol/mg cell protein.

16(Canceled).

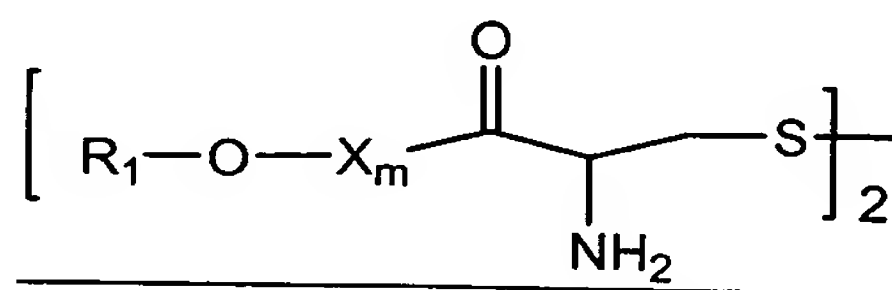
17(Original). A method of treating or preventing the development of cancer in a mammalian subject comprising treating cancer cells of said subject with a composition of claim 1.

18(Currently Amended). The method according to claim 17, wherein said treating comprises administering said composition *in vivo* or *ex vivo*.

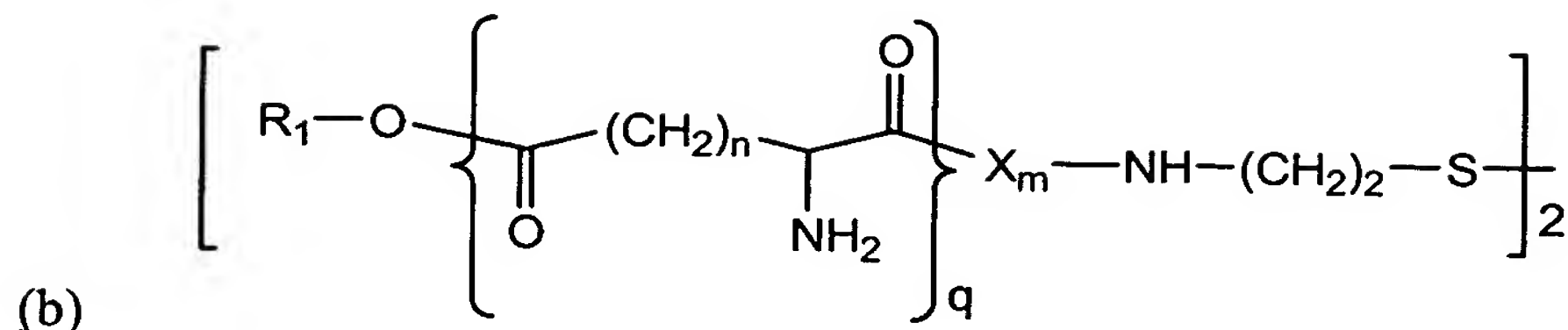
19-20(Canceled).

21(Currently Amended). The method according to claim 17, further comprising treating said subject, or exposing said subject to, a ~~second~~ cytotoxic agent, at a time selected from the group consisting of before treatment with the a pharmaceutical composition useful for the treatment of cancer comprising a compound selected from the formula consisting of

(a)



and



wherein for either formula (a) and (b),  $R_1$  is a substituted or unsubstituted lower alkyl of 1 to 10 carbon atoms, X is a naturally-occurring or non-naturally-occurring amino acid, and m is an integer of 0 to 20 and wherein for formula (b), n is an integer of 1 or 2, and q is an integer of 0 or 1, or a pharmaceutically acceptable salt thereof in a pharmaceutically acceptable carrier of claim 1, after treatment with the said pharmaceutical composition of claim 1, and concurrently with treatment with the said pharmaceutical composition of claim 1.

22(Original). The method according to claim 21, wherein said cytotoxic agent is selected from the group consisting of a chemotherapeutic agent, an apoptogen and radiation.

23(Original). The method according to claim 17, wherein said treating comprises administering said composition to said subject at a dosage of from 1.0  $\mu\text{g}$  to 500 mg/kg patient body weight.

24(Canceled).

25(Currently Amended). The method according to claim 17, wherein said compound is selected from the group consisting of a compound of formula (a) which is a cystine dimethyl ester and a compound of formula (b), which is aspartyl-cystamine dimethyl ester.

26(Canceled).

27(Original). A method of determining sensitivity of cancer cells to apoptosis comprising: contacting said cancer cells in culture with a pharmaceutically effective amount of a composition of claim 1 and measuring the rate of apoptosis in said culture.

28(Original). A pharmaceutical kit for the treatment of cancer comprising at least one composition of claim 1 in a dosage unit.

29(Original). The kit according to claim 28, further comprising at least one compound of formula (a) and at least one compound of formula (b).

30(Original). The kit according to claim 28, wherein said compound of formula (a) is cystine dimethyl ester.

31(Original). The kit according to claim 28, wherein said compound of formula (b) is an aspartyl-cystamine dimethyl ester.

32(Currently Amended). The kit according to claim 28, further comprising ~~an~~ an ~~additional~~ a cytotoxic compound.